

**Listing of the Claims**

1. (Currently Amended) Modular device (1) for the detection and/or transmission of radiation, comprising - a carrier (10)-with a mounting surface (12) and a set of first connecting elements (11); - a set of modules (20)-for the detection and/or transmission of radiation, each of them comprising a second connecting element (21)-that can be coupled to one of said first connecting elements (11)-to form a joint.
2. (Currently Amended) Modular device according to claim 1, characterized in that wherein the joint is adapted to allow rotation on at least one axis and/or revolution around a point and/or a linear movement.
3. (Currently Amended) Modular device according to claim 1, characterized in that wherein the modules (20)-may contact each other when they are mounted on the carrier (10).
4. (Currently Amended) Modular device according to claim 1, characterized in that wherein the modules (20)-comprise a base portion (22)-that is larger in diameter than other parts of the module.
5. (Currently Amended) Modular device according to claim 1, characterized in that wherein the second connecting elements are balls (21)-or cylinders.
6. (Currently Amended) Modular device according to claim 1, characterized in that wherein the first connecting elements are constituted by circular or rectangular holes (11) in the mounting surface (12)-and that the second connecting elements (21)-can be snapped into or through said holes (11)-or fixed to the holes (11)-by a locking element.
7. (Currently Amended) Modular device according to claim 6, characterized in that wherein the second connecting elements (21)-protrude from the backside of the carrier (10) when fixed to the holes (11).

8. (Currently Amended) Modular device according to claim 1, characterized in that wherein the second connecting elements are flexible rods.
9. (Currently Amended) Modular device according to claim 1, characterized in that wherein the mounting surface (12) is a section of a plane, a cylinder or a sphere.
10. (Currently Amended) Modular device according to claim 1, characterized in that wherein the modules (20) have a shape that allows the gapless filling of a plane, particularly the shape of a prism with a rectangular or hexagonal cross section.
11. (Currently Amended) Modular device according to claim 1, characterized in that wherein the modules (20) comprise a sensitive unit (24) on which an anti-scatter grid (25) is mounted.
12. (Currently Amended) Modular device according to claim 1, characterized in that wherein the first and second connecting elements (11, 21) are adapted to make at least one electrical contact when coupled together.
13. (Currently Amended) Carrier (10) for a modular device (1) for the detection and/or transmission of radiation, comprising a mounting surface (12) and a set of first connecting elements (11) that can be coupled with second connecting elements (21) of modules (20) to form a joint.
14. (Currently Amended) Module (20) for a modular device (1) for the detection and/or transmission of radiation, comprising a second connecting element (21) that can be coupled to a first connecting element (11) of a carrier (10) to form a joint.
15. (Currently Amended) Imaging device, particularly a CT-system or a PET scanner, comprising an X-ray sensitive modular device (1) according to claim 1.